

18CM LCD DIGITAL VIDEO RECORDER WITH TWO DAY/NIGHT CAMERAS

SC242







WIRELESS

WIRELESS VIDEO SIGNAL TRANSMISSION WITH DIGITAL ENCRYPTION WITHOUT SIGNAL LOSS



18cm COLOUR LCD SCREEN

WITH IN-BUILT DIGITAL VIDEO RECORDER AND REMOTE CONTROL



NICHT VISION 24 INFRA-RED LEDS FOR NIGHT VISION OF UP TO 10m

SD CARD

STORE RECORDINGS ONTO 8GB SD CARD (INCLUDED)

50 METRES

LONG TRANSMISSION RANGE UNDER IDEAL CONDITIONS*

INSTRUCTIONS FOR USE

IMPORTANT! PLEASE READ THESE INSTRUCTIONS CAREFULLY.



IMPORTANT BEFORE RETURNING THIS PRODUCT TO THE RETAILER

Customer Service Phone: (03) 9982 5111 (Monday to Friday 8.30am - 5.30pm EST)

Email: customerservice@orionlive.com.au

For further information visit www.orionlive.com.au

1 IDENTIFICATION







2 FEATURES

- **)** 18cm 16:9 LCD screen.
- > 2.4 GHz digital frequency hopping spread spectrum (FHSS).
- Wireless range up to 50 metres in open air, line of sight.
- **>** MPEG-4 compression.
- Single camera mode records VGA at 25FPS (frames per second) or multiple camera mode records QVGA at 30FPS/CH, VGA resolution 640px x 480px.
- 8GB micro SD card included, supports SDHC memory card up to 32GB.
- **>** Simultaneously preview and record from all wireless cameras.
- Independent motion-detect recording with adjustable mask zone on any of 4 cameras.
- Multiple recording mode selectable (manual / scheduled / motion detect).
- **>** Built in microphone.
- > 24/7 scheduled recording.
- CMOS colour cameras with 24 IR LED's for up to 7 metres night vision.
- Camera has built-in IR cut filter for true colour representation.
- **>** Camera has IP43 weather proof rating.

3 RESPONSIBLE USE

Please ensure this equipment is used in accordance with any local laws or regulations, especially if your device is capable of audio recording. Users of this equipment should at all times act responsibly and consider the rights and reasonable expectations of privacy of individuals. Surveillance should be for a legitimate purpose related to the activities of the person or organisation conducting it. We recommend that you clearly indicate (written or otherwise) that surveillance is in operation in the monitored area.

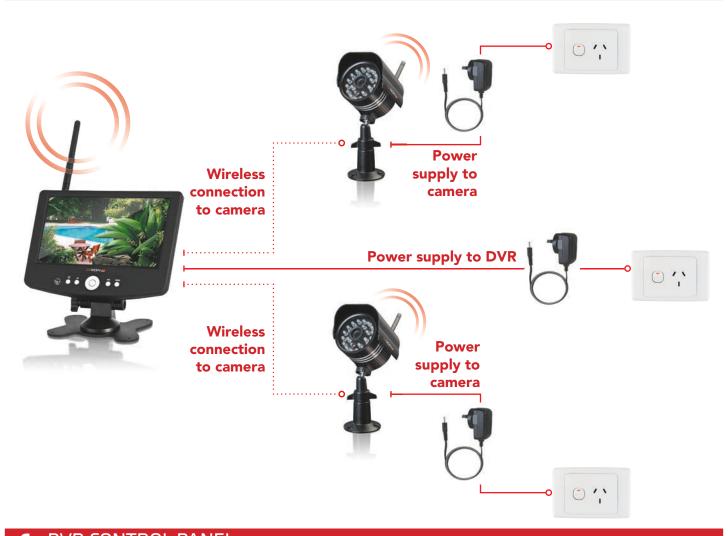
4 WARNING

- **)** Do not drop, puncture, or disassemble the cameras or DVR.
- **)** Do not tug the power adapter, use the plug to remove it from the wall.
- Do not mount in position directly exposed to sun, rain and avoid mounting near radio transmitting devises, metal objects or heat sources.
- **>** Do not use DVR and cameras when there is a storm or lightning in your area.
- **)** Do not crush or damage the power cable.
- **)** Do not cover the vents on the unit, leave adequate space for ventilation.
- Use the cameras and DVR with care, avoid unnecessary force or impact.





5 SYSTEM CONNECTION



6 DVR CONTROL PANEL



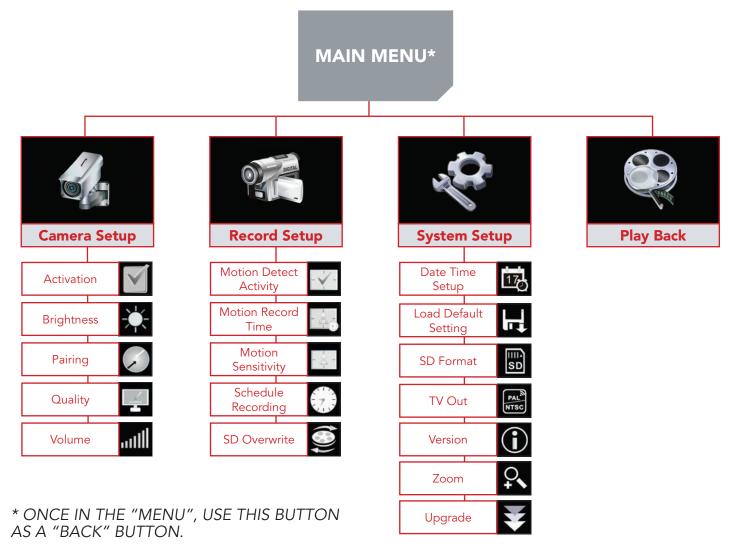
7 REMOTE CONTROL FUNCTION

BUTTON	FUNCTION	
り し	Turn ON/OFF display screen	
CH1	View channel 1 camera on display	
CH2	View channel 2 camera on display	
СНЗ	View channel 3 camera on display	
CH4	View channel 4 camera on display	
QUAD	View all channel on display	
AUTO	Automatically rotate channel 1-4 camera on display	
REC/ STOP	Press once to record, press again to stop recording	
AV Press once to display audio and visual to connected screen, the DVR display will go black. Press again to return to DVR display		



BUTTON	FUNCTION		
•	To scroll up and down to select item in menu mode To increase or decrease volume in live or playback mode		
*	To scroll left and right to select item in menu mode To fast-forward or rewind in playback mode To select channel 1-4 camera on display in live mode		
▶	To play or pause the selected recorded video in playback mode file To select SINGLE/QUAD/AUTO display in live mode		
MENU	Press once to enter into DVR menu and setup, press again to exit		
DEL	Press to delete		

8 MENU LAYOUT





9 SYSTEM INSTALLATION

> IT IS RECOMMENDED TO SET UP AND TEST UNITS BEFORE FIXED MOUNTING INSTALLATION.



- 1 Install antenna on DVR unit and all cameras.
- 2 Install stand on DVR unit.
 DO NOT permanently mount cameras and DVR during set up stage.
- 3 Connect power supply to a 240V power point and DVR.
- 4 Install stands on all cameras.
- 5 Connect power supply to 240V power point and all cameras.











6







- 6 DVR screen will automatically turn on after power supply connected.
- 7 The cameras come with the kit have already paired to the DVR. Live image from camera will be displayed on the DVR display screen when power is connected.
- 8 Insert SD card into the DVR.
- 9 Format SD card: Menu> SYSTEM SETUP> SD FORMAT> YES.
- 10 Wireless surveillance system is ready to use.
- 11 Mount DVR and cameras on suitable locations.















10 OPERATION



SECTION 1: LIVE DISPLAY

The cameras come with the kit have already paired to the DVR. When power connected to DVR and all cameras, live display image should be showing on the DVR display screen.

1. Wireless Signal Indicator

Shown on DVR top right hand corner. Please ensure cameras are placed at a reasonable distance (< 50m away from the DVR) and location (see section 6).

2. Recording Indicator

Shown on the DVR bottom right hand corner. When the DVR is recording, the red REC dot indicator will be displayed.

3. SD Card Indicator SD

Shown on the DVR top left hand corner. When suitable SD card is inserted and detected, SD card in<u>dicator</u> will be displayed.

4. Channel Indicator 1

Shown on the DVR top left hand corner. The current channel number will be displayed. Press "CH1/CH2/CH3/CH4" on remote control or "<" button on remote control and DVR control panel to switch between channels.

5. Display Mode Indicator 1

Shown on the top of the DVR display. For example 1 for single display mode; quad display mode; auto display mode.

6. Date and Time Indicator

2013/03/15 08:02:55

Shown at the bottom of the DVR display.

WIRELESS SIGNAL INDICATOR				
Signal Strength	Indicator	Possible Action		
Perfect	Y iii	N/A		
Good	Y 11	N/A		
Fair	Y ii	Low signal, recommended relocating camera or DVR, check surrounding interference, installation, power, mounting location etc		
Low	T	Low signal, recommended relocating camera or DVR, check surrounding interference, installation, power, mounting location etc		
No Signal	Y	No signal, please check trouble shooting guide and warning		

> TO SELECT DVR DISPLAY VIEW

Press ">||" button on the DVR control panel or remote control to select "SINGLE/QUAD/AUTO" display mode.

In SINGLE display mode, press "<" on the DVR control panel or remote control to view each camera display individually on the DVR display screen.

In QUAD display mode, all connected cameras will display on the DVR display screen.

In AUTO display mode, DVR will automatically rotate channel 1-4 camera on display.

> AUTO DISPLAY MODE

Automatically rotate channel 1-4 camera on display. To eliminate invalid channels:

MENU>CAMERA SETUP>ACTIVATION>OFF.

> SECTION 2: RECORDING MODE

SC242 kit comes with an 8 GB memory card that can record up to 3 days of video, at VGA format. Recording time depends on video format, VGA, QVGA video format, and sound. VGA (640x480) has higher resolution than QVGA (320x240). Recording at VGA resolution improves clearness and quality of video, but consumes more storage space. Sound reduces the time available to record from the memory card.

A suitable SD card must be inserted and formatted before recording, SC242 supports up to 32 GB SD card including SDHC type.

Recorded files are limited to 10 minutes intervals. If continuously recording for more than 10 minutes, a new recording file will be automatically created until the SD card is full. When SD card is full, recording will automatically stop, or over write function can be enable to over write:

MENU>RECORD SETUP>SD OVER WRITE>YES

11 OPERATION

> RECORDING LIVE:

Set DVR display mode to SINGLE or QUAD, by pressing ">II" button on the DVR control panel or remote control, DVR cannot record AUTO display mode.

Press "REC" button on the DVR control panel or remote control to record, press "REC" button again to stop recording.

> SCHEDULED RECORDING MODE:

MENU>RECORD SETUP>SCHEDULE RECORDING Set start time and end time, and select ON by pressing ">II" when finish.

> MOTION DETECTION RECORDING MODE:

1. To enable motion detection

MENU>RECORD SETUP>MOTION DETECT ACTIVITY>ON

2. Then setup motion detection sensitivity

MENU>RECORD SETUP>MOTION SENSITIVITY>LOW/MEDIUM/HIGH

3. Finally setup motion record time duration if motion detected

MENU>RECORD SETUP>MOTION RECORD TIME>15SEC/30SEC/1MIN

> SECTION 3: PLAYBACK

Play back recorded video on DVR:

MENU>PLAY BACK>VIDEO>SELECT DATE>SELECT TIME

PRESS "<" BUTTON ON THE DVR CONTROL PANEL OR REMOTE CONTROL TO RETURN TO PREVIOUS PAGE

PRESS "MENU" BUTTON ON THE DVR CONTROL PANEL OR REMOTE CONTROL TO RETURN TO MENU PAGE

Inside recorded video storage Use "^ or v" button on the DVR control panel or remote control to navigate, press ">||" button on the DVR control panel or remote control to entre, play or pause video.

While the video is playing, press "< or >" to fast-forward and rewind the video.

To delete file:

Use ">" button on the DVR control panel or remote control, or use "DEL" button on remote control to delete selected file. After pressing ">" button, the system will ask "ARE YOU SURE, select "YES or NO" then press ">||" button to confirm.

Play back recorded video on computer

Insert SD card containing recordings into computer card reader.

Download latest version of VLC Media Player to play back recorded files. www.videolan.org

> SECTION 4: CAMERA PAIRING

The cameras come with the kit have already paired to the DVR.

Camera pairing function is necessary for connecting additional cameras. Additional cameras are assigned to a different channel on the wireless channel; up to 4 cameras can be connected.

* NOTE: please pair the camera before permanent installation/mounting.

To pair a camera:

Ensure all cameras and DVR is powered.

Ensure all wireless channels are enabled for adding additional camera.

MENU>Camera setup>Activation>CAM1/CAM2/CAM3/CAM4>ON.

MENU>CAMERA SETUP>PAIRING>1/2/3/4> press pairing button on the camera within 10 seconds.



> SECTION 5: AV OUTPUT

To display image on external screen press "AV" button on the front control panel, press "AV" button again to return to DVR display

In AV mode, DVR display screen will automatically turn off.

Use supplied AV cable to connect to external display screen

Please check external display screen format, PAL/ NTSC, SC242 DVR supports dual output format.

PAL and NTSC, to change AV output format: MENU> SYSTEM SETUP >TV OUT>PAL/NTSC

> SECTION 6: SD CARD

SD card required to format for first time use. The DVR support SD card up to 32 GB maximum, include SDHC type SD card.

MENU> SYSTEM SETUP> SD FORMAT> YES

> SECTION 7: FIRMWARE UPGRADE

Firmware upgrade is only for factory and authorizes repairer use only, do not upgrade the firmware.



12 TROUBLESHOOTING GUIDE

PROBLEM	POSSIBLE CAUSE	SUGGESTED REMEDY	
DVR/Camera has no power or not powering up	Power supply is loose or unplugged, no power at socket outlet/power point	Check all cables and power supply connection. Check power at socket outlet/power point.	
SD Card is not detected by DVR	SD card not formatted	Format SD card, please see "Operation Section 6".	
No picture	Camera out of range	Relocate camera closer to DVR (vise versa).	
	Camera not paired	Pair camera, please see "Operation Section 4".	
	Signal interference	Relocate camera and DVR, away from sun, rain, radio transmitting devices, heat sources, metal objects or major obstacles.	
	No power at camera or no power at socket outlet/power point	Check all cables and power supply connection.	
Frozen white screen	-	Disconnect power to DVR, then reconnect.	
When IR night vision is activated, screen only displayed white.	Infra-red LED light is reflected off from glass or reflective objects that causing white light	Relocated camera away from windows, reflective and glass objects, or remove obstacles.	
When IR night vision is activated, screen only displayed black and white	Infra-red LED light is activated	This is normal, no action required.	
DVR did not record scheduled or motion detected setting	DVR is not set up correctly, SD memory card missing or not compliable	Check DVR date and time, scheduled setting date and time, and motion detected setting setup. Check SD memory card is inserted in the DVR and compliable to use.	
SD memory card full	Overwrite is not enabled	Enable SD memory card overwrite, or reformat SD memory card, or insert new SD memory card.	
Recorded videos does not have sound	Mute is on	Turn off mute. Note: Audio recording is prohibited or illegal in some states, or required consent from both parties. Please consult your local legal advisers before audio recording.	
Channels disappeared during auto or manual scan	Channels has been turned OFF	Turn camera channels ON, please see "Operation Section 4".	
Poor image quality	Signal interference	Relocate camera and DVR, away from sun, rain, radio transmitting devices, heat sources, metal objects or major obstacles. Relocate camera closer to DVR (vise versa). Check antenna connection.	
Low or unstable signal	Antenna	Adjust antenna connection or relocate camera, closer to DVR (vise versa).	
	Signal interference		
	Strong radio emitting or transmitting devices nearby	Relocate camera and DVR, away from sun, rain, radio transmitting devices,	
	Strong electromagnetic interference nearby	heat sources, metal objects or major obstacles.	
	Too close to metal objects		
Audio interference	Camera and DVR are too close	Camera has a high sensitivity microphone, keep the camera and DVR at least 5 meters apart, if the camera must be within 5 meters of the DVR, reduce the volume or turn on MUTE.	



13 SPECIFICATIONS

DIGITAL VIDEO RECORDER

> DISPLAY

Screen 18cm [7"] TFT LCD [16:9]

Resolution 800 [H] x RGB x 480 [V]

> WIRELESS VIDEO & AUDIO INPUT

Frequency Range 2.400GHz ~ 2.483GHz

Wireless Range Up to 50m*

Receiving Sensitivity -85dBm

> AV OUTPUT

Video Format PAL or NTSC

Video Output 1ch CVBS 1.0Vp-p, Impedance 75Ω

Audio Output 1ch Audio Ouput, Impedance 600Ω

> RECORDING

Compression Format MPEG4

Recording Resolution VGA/QVGA

Recording Mode Manual / Schedule / Motion Detection

Frame Rate 25fps@VGA / 30fps@QVGA

Data Storage SD Card (8GB Included)

CONNECTOR

USB Mini USB 2.0

SD Card 32G Max

> GENERAL

Power Supply DC 5V 1A

Power Consumption 4W Max

Dimensions 183(L) x 136(W) x 30(H) mm

Weight 450g

Operating Temp. 0°C ~ 40°C

Operating Humidity 10% ~ 90%

CAMERA

> VIDEO

Sensor Colour CMOS Sensor

Image Resolution 640×480

Lens F: 2.5mm

Electronic Shutter 1/60 ~1/15.000 sec

Gain Control Auto

White Balance Auto

> NIGHT VISION

Infra-red Light 24 IR LEDs

Range Up to 10m

IR Cut Filter Yes

> GENERAL

Power Supply DC 5V 1A

Power Consumption 3W Max

IP Rating IP43

Dimensions 100(L) x 80(W) x 80(H) mm

Weight 245g

Operating Temperature $0^{\circ}\text{C} \sim 40^{\circ}\text{C}$

Operating Humidity 10% ~ 90%

14 WARRANTY

Arlec guarantees this product in accordance with the Australian Consumer Law.

Arlec also warrants to the original first purchaser of this product ("you") from a retailer that this product will be free of defects in materials and workmanship for a period of 12 months from the date of purchase; provided the product is not used other than for the purpose, or in a manner not within the scope of the recommendations and limitations, specified by Arlec, is new and not damaged at the time of purchase, has not been subjected to abuse, misuse, neglect or damage, has not been modified or repaired without the approval of Arlec and has not been used for commercial purposes ("Warranty").

If you wish to claim on the Warranty, you must, at your own expense, return the product, and provide proof of original purchase and your name, address and telephone number, to Arlec at the address below or the retailer from whom you originally purchased the product within 12 months from the date of purchase.

Arlec will (or authorise the retailer to) assess any claim you may make on the Warranty in the above manner and if, in Arlec's reasonable opinion, the Warranty applies, Arlec will at its own option and expense (or authorise the retailer to) replace the product with the same or similar product or repair the product and return it to you or refund the price you paid for the product. Arlec will bear its own expenses of doing

those things, and you must bear any other expenses of claiming on the Warranty.

The Warranty is in addition to other rights and remedies you may have under a law in relation to the product to which the Warranty relates. Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

Arlec Australia Pty. Ltd. ACN 009 322 105 ("Arlec") gives the Warranty. Arlec's telephone number, address and email address are:

Customer Service: (03) 9982 5111 New Zealand Toll Free: 0800 003 329

Building 3, 31 – 41 Joseph Street, Blackburn North, Victoria, 3130 Blackburn North LPO, P.O. Box 1065, Blackburn North, 3130

Blackburn North LPO, P.O. Box 1065, Blackburn North, 313 Email: custservice@arlec.com.au

CPIN002632/2

^{*} Range depends on location and temperature.



QUICK START GUIDE

01

Install antenna on DVR unit and all cameras.



Install stand on DVR unit. Do not permanently mount cameras and DVR at this stage.



Connect power supply to a 240V power point and DVR.



04

Install stands on all cameras.



Connect power supply to 240V power points and cameras.



06

DVR screen will automatically turn on after power supply connected.



07

Cameras and DVR are paired. Camera live images displayed on DVR screen after start up.



Insert SD card into the DVR.



Format SD card:
Menu>
SYSTEM SETUP>
SD FORMAT> YES



<u>10</u>

Wireless surveillance system is ready to use.



Mount DVR and cameras on suitable locations.





